

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	35	("4324164"   "5054361"   "5115705").PN. OR ("5247129").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/04/22 13:03
L3	6	L2 and (sound adj board)	US-PGPUB; USPAT; USOCR	OR	ON	2010/04/22 13:09
L7	20	(US-20070017353-\$ or US-20030015086-\$ or US-20070028755-\$).did. or (US-1893893-\$ or US-4084473-\$ or US-4378721-\$ or US-6399870-\$ or US-6846980-\$ or US-7002070-\$ or US-4058045-\$ or US-4744281-\$ or US-7432428-\$ or US-5218160-\$ or US-5854438-\$ or US-1994889-\$ or US-2038995-\$ or US-2001392-\$ or US-3591699-\$ or US-5001339-\$).did. or (US-1893895-\$).did.	US-PGPUB; USPAT; USOCR	OR	ON	2010/04/22 13:22
L9	15	L7 and strings	US-PGPUB; USPAT; USOCR	OR	ON	2010/04/22 13:22
L10	9	L7 and strings and ((sound adj board) soundboard)	US-PGPUB; USPAT; USOCR	OR	ON	2010/04/22 13:25
L11	8	L7 and strings and ((sound adj board) soundboard) and (piano pianoforte)	US-PGPUB; USPAT; USOCR	OR	ON	2010/04/22 13:26
L12	8	L7 and strings and ((sound adj board) soundboard) and (piano pianoforte)	US-PGPUB; USPAT; USOCR	OR	ON	2010/04/22 13:26
L13	0	L7 and strings and ((sound adj board) soundboard) and (piano pianoforte) and spectrum	US-PGPUB; USPAT; USOCR	OR	ON	2010/04/22 13:27
L15	13	84/738.ccls.	US-PGPUB	OR	ON	2010/04/22 13:37

L16	108	84/738.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/04/22 13:37
L17	1292	84/626,737,726,744.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/04/22 13:40
L18	461	381/152.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/04/22 13:40
L19	2	(L17 L18) and strings and ((sound adj board soundboard) and (piano pianoforte) and spectrum	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/04/22 13:41
S2	3	("4058045" "5247129" "5262586").pn.	USPAT	OR	ON	2008/01/04 11:47
S4	1	"20070079693".pn.	US-PGPUB	OR	ON	2008/01/04 14:50
S5	7	((VALLI near2 ROBERTO) (LAMACCHIA near2 LUIGI) (SCHIMMEL near2 NIKOLAUS)).in.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/01/04 09:40
S6	1335	84/192,723,725,731,741,744,DIG.10,DIG.24.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/01/04 13:50

S7	51	S6 and (piano pianoforte) and (soundboard (sound adj board) ("sound board"))	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/01/04 11:13
S8	22	S7 and (transducer sensor)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/01/04 11:13
S9	1	("1278180").pn.	EPO	OR	ON	2008/01/04 11:47
S10	1	S6 and ("actuator" "driver" "transducer") same (ring near2 magnet) same coil	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/01/04 13:52
S11	360	("actuator" "driver" "transducer") same (ring near2 magnet) same coil	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/01/04 13:52
S12	1446	(piano pianoforte) and (string wire) and sample	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/01/04 14:51
S13	64	S12 and (soundboard ("sound board") (sound adj board))	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/01/04 14:52
S14	10	("1893895"   "4058045"   "4868869"   "5070759").PN. OR ("5262586").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/11/06 12:52

S15	151	"1893895"   "1962410"   "2001392"   "20030015086" "2038995"   "2045917"   "2505804"   "2513109"   "2530252"   "2856805"   "3049958"   "3178512"   "3334195"   "3357291"   "3429976"   "3449531"   "3509282"   "3519721"   "3530228"   "3543630"   "3553336"   "3711617"   "3908503"   "3931752"   "4058045"   "4084473"   "4151379"   "4198550"   "4245540"   "4324164"   "4338848"   "4392027"   "4448103"   "4450749"   "4630520"   "4704931"   "4718098"   "4744281"   "4768412"   "4868869"   "4914750"   "4939969"   "4957552"   "5020410"   "5031501"   "5040447"   "5054361"   "5058173"   "5070759"   "5115705"   "5121669"   "5142961"   "5153364"   "5247129"   "5287413"   "5440072"   "5442986"   "5524519"   "5557057"   "5706358"   "5864080"   "5916405"   "5981861"   "6031926"   "6144746"   "6169809"   "6188775"   "6191348"   "6191350"   "6351542"   "6399870").PN. OR ("1893893"   "1893895"   "2007/0017353"   "4058045" "4084473"   "5247129"   "5262586"   "6399870"   "6700047"   "6846980"   "7002070").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/11/06 13:54
S16	132	"1893895"   "1962410"   "2001392"   "20030015086" "2038995"   "2045917"   "2505804"   "2513109"   "2530252"   "2856805"   "3049958"   "3178512"   "3334195"   "3357291"   "3429976"   "3449531"   "3509282"   "3519721"   "3530228"   "3543630"   "3553336"   "3711617"   "3908503"   "3931752"   "4058045"   "4084473"   "4151379"   "4198550"   "4245540"   "4324164"   "4338848"   "4392027"   "4448103"   "4450749"   "4630520"   "4704931"   "4718098"   "4744281"   "4768412"   "4868869"   "4914750"   "4939969"   "4957552"   "5020410"   "5031501"   "5040447"   "5054361"   "5058173"   "5070759"   "5115705"   "5121669"   "5142961"   "5153364"   "5247129"   "5287413"   "5440072"   "5442986"   "5524519"   "5557057"   "5706358"   "5864080"   "5916405"   "5981861"   "6031926"	US-PGPUB; USPAT	OR	ON	2008/11/06 13:55

		"6144746"   "6169809"   "6188775"   "6191348"   "6191350"   "6351542"   "6399870").PN. OR ("1893893"   "1893895"   "2007/0017353"   "4058045"   "4084473"   "5247129"   "5262586"   "6399870"   "6700047"   "6846980"   "7002070").URPN.				
S17	15	("20020148346"   "20030015086"   "20050145100"   "20070028755"   "3449531"   "3509282"   "5189242"   "5537908"   "5981861"   "6351542"   "6399870"   "6846980"   "7002070").PN. OR ("7432428").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/11/06 14:21
S18	50	("20070079693" "5612502" "4314497" "4366740" "4809579" "4913024" "5218160" "5304734" "5469769" "5542329" "5814744" "6127615" "7429699" "20040154862" "5854438" "4805511" "4386546" "5748513" "5918298" "6150598" "4294153" "4968551" "5569870" "6057498" "4928563" "6093879" "4919031" "4562764" "4856403" "5010801" "5241127" "5455380" "5602358" "4030396" "4269103" "4313362" "4450748" RE31722 "4768414" "4939969" "5187314" "5198601" "5198604" "5212336" "5252776" "5272273" "5286911" "5290969" "5422431" "5444181" ).pn.	US-PGPUB; USPAT	OR	ON	2008/11/06 14:39
S19	1	(84/192 381/152).ccls. and 84/645.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 14:40
S20	2	(84/192 381/152 84/189).ccls. and (detect\$3 near2 key)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 14:42
S21	685	(84/192 381/152 84/189).ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 14:43

S22	18	(381/152).ccls. and piano	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 14:43
S23	160	84/192.ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 14:47
S24	1	84/192.ccls. and detect\$3 near2 key	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 14:47
S25	5	(84/192 381/152 84/189).ccls. and (84/627,633,663,665,702,711,738,741).ccls.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 14:57
S26	21	(US-20070017353-\$ or US-20030015086-\$ or US- 20070028755-\$).did. or (US-1893893-\$ or US-4084473- \$ or US-4378721-\$ or US-5247129-\$ or US-5262586-\$ or US-6399870-\$ or US-6846980-\$ or US-7002070-\$ or US-4058045-\$ or US-6700047-\$ or US-4744281-\$ or US-7432428-\$ or US-5218160-\$ or US-5854438-\$ or US-1994889-\$ or US-2038995-\$ or US-2001392-\$).did. or (US-1893895-\$).did.	US-PGPUB; USPAT; USOCR	OR	ON	2008/11/06 15:09
S27	4	S26 and spectrum	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 15:09
S28	8	piano and ("sound board" soundboard) and (amplify\$3 amplification augment\$3)	DERWENT	OR	ON	2008/11/06 15:11

S29	14	("3591699"   "3651242"   "5099738").PN. OR ("5218160").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/11/06 15:27
S30	32	("4324164"   "5054361"   "5115705").PN. OR ("5247129").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/11/06 15:28
S31	10	("1893895"   "4058045"   "4868869"   "5070759").PN. OR ("5262586").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/11/06 15:28
S32	21	("3357291"   "3711617"   "4058045"   "4084473"   "4245540"   "4338848"   "4448103"   "4450749"   "4704931"   "4744281"   "4768412"   "4914750"   "4939969"   "4957552"   "5020410"   "5031501"   "5058173"   "5142961"   "5440072"   "5524519").PN. OR ("6700047").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/11/06 15:31
S33	162	piano and (augment\$3 enhanc\$3) and (soundboard "sound board" (sound adj board))	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 16:27
S34	55	piano and ((augment\$3 enhanc\$3) same (soundboard "sound board" (sound adj board)))	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 16:28
S35	23	S33 and (detect\$3 near2 key)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 16:28
S36	4	"3779125".pn.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 16:41

S37	0	piano and (soundboard "sound board" (sound adj board)) and (electronic adj voicing)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 16:46
S38	4	"electronic voicing"	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 16:46
S39	13	piano and (soundboard "sound board" (sound adj board)) and voicing	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/11/06 16:48
S40	28	("2001392"   "2045917"   "2513109"   "2530252"   "2856805"   "3429976"   "3553336").PN. OR ("4058045").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/11/06 17:21
S41	0	"5001339".pn.	US-PGPUB	OR	ON	2008/12/26 15:49
S42	1	"5001339".pn.	USPAT	OR	ON	2008/12/26 15:49
S43	21	("3357291"   "3711617"   "4058045"   "4084473"   "4245540"   "4338848"   "4448103"   "4450749"   "4704931"   "4744281"   "4768412"   "4914750"   "4939969"   "4957552"   "5020410"   "5031501"   "5058173"   "5142961"   "5440072"   "5524519").PN. OR ("6700047").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/12/26 16:03



S44	23	(US-20070017353-\$ or US-20030015086-\$ or US-20070028755-\$).did. or (US-1893893-\$ or US-4084473-\$ or US-4378721-\$ or US-5247129-\$ or US-5262586-\$ or US-6399870-\$ or US-6846980-\$ or US-7002070-\$ or US-4058045-\$ or US-6700047-\$ or US-4744281-\$ or US-7432428-\$ or US-5218160-\$ or US-5854438-\$ or US-1994889-\$ or US-2038995-\$ or US-2001392-\$ or US-3591699-\$ or US-5001339-\$).did. or (US-1893895-\$).did.	US-PGPUB; USPAT; USOCR	OR	ON	2008/12/26 16:11
S45	166	("1893895"   "1962410"   "2001392"   "20030015086"   "2038995"   "2045917"   "2505804"   "2513109"   "2530252"   "2856805"   "3049958"   "3178512"   "3334195"   "3357291"   "3429976"   "3449531"   "3509282"   "3519721"   "3530228"   "3543630"   "3553336"   "3591699"   "3651242"   "3711617"   "3908503"   "3931752"   "4058045"   "4084473"   "4151379"   "4198550"   "4245540"   "4324164"   "4338848"   "4392027"   "4448103"   "4450749"   "4630520"   "4704931"   "4718098"   "4744281"   "4768412"   "4868869"   "4914750"   "4939969"   "4957552"   "5020410"   "5031501"   "5040447"   "5054361"   "5058173"   "5070759"   "5099738"   "5115705"   "5121669"   "5142961"   "5153364"   "5247129"   "5287413"   "5440072"   "5442986"   "5524519"   "5557057"   "5706358"   "5864080"   "5916405"   "5981861"   "6031926"   "6144746"   "6169809"   "6188775"   "6191348"   "6191350"   "6351542"   "6399870").PN. OR ("1893893"   "1893895"   "2007/0017353"   "4058045"   "4084473"   "5218160"   "5247129"   "5262586"   "6399870"   "6700047"   "6846980"   "7002070").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/12/26 16:11
S46	134	S45 not (S43 S44)	US-PGPUB; USPAT; USOCR	OR	ON	2008/12/26 16:12
S47	24	S46 and (soundboard (sound adj board))	US-PGPUB; USPAT; USOCR	OR	ON	2008/12/26 16:12

S48	104	(piano pianoforte) and ((soundboard (sound adj board)) with (additional energy magnify\$3 amplify\$3))	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/12/26 16:48
S49	1	"20070079693".pn.	US-PGPUB	OR	ON	2009/07/20 12:02
S50	0	S49 and (harmonic with (7hp 7hq memory ram rom))	US-PGPUB	OR	ON	2009/07/20 12:02
S51	1	("5986201" "20040001601").pn.	USPAT	OR	ON	2009/08/13 20:36
S52	2	("5986201" "20040001601").pn.	US-PGPUB; USPAT	OR	ON	2009/08/13 20:36

### EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	2	((piano pianoforte) and (strings) and ((sound adj board) soundboard) and (spectrum)).clm.	USPAT; UPAD	OR	ON	2010/04/22 13:11
L5	44	((piano pianoforte) and (strings) and ((sound adj board) soundboard) and (spectrum))	USPAT; UPAD	OR	ON	2010/04/22 13:15
L8	4	"Term Removed"	USPAT	OR	ON	2010/04/22 13:22

4/ 22/ 2010 1:58:50 PM

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